

4436

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Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
State: <i>Florida</i>
11-5613
DESCRIPTIVE REPORT.
Sheet No. <i>(D)</i> 4436
LOCALITY:
<i>Vicinity Cumberland</i>
<i>Sound. East</i>
<i>Coast of Florida</i>
1924
CHIEF OF PARTY:
<i>F. S. Borden</i>

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SHEET NO....
(Field Letter D)

VICINITY OF ST. MARY'S
ENTRANCE
FLORIDA * GEORGIA

Steamer BACHE

F. S. Barden, Comd'g.

EXTENT

This sheet comprises the area in the vicinity of St. Mary's Entrance. It overlaps Sheet "C" to the southward, Sheet "E" to the northward and Sheet No. 3770 (R.F. Luce, 1915) to the eastward. The hydrography includes a resurvey of Amelia River up to the entrance of Lanceford Creek and practically all of Cumberland Sound. In general the work was carried up the inlets until a satisfactory junction was made with the older surveys. In this connection it was found necessary to carry the work well up into Cumberland Sound as extensive changes were found to have taken place in this locality. In overlapping the offshore sheet (Sheet No. 3770) it was found that the lines on that sheet, having been spaced a mile apart, did not properly define the five fathom curve. For this reason the work was extended well to the eastward in order to locate the curve as it exists.

CHANGES

The depth over the St. Mary's Entrance bar was found about the same as shown in the present charts. The spit extending southeastward from the outer end of the North Jetty has been scoured away to some extent and there is now thirty one feet of water on the spit in the vicinity of Can buoy No. 1. Due to this change it would seem that a Min buoy should be used here, at the outer end of the five fathom curve, instead of a Can buoy. This change in the buoyage has been recommended by members of the St. Mary's Pilot Association. The controlling depth to the Florida Terminal Co. wharves remains about the same but the shoal abreast of the wharves has extended southeastward and there is barely enough width for a deep draft vessel to swing when docking.

Extensive changes have taken place in Cumberland Sound due to the shifting and changing in the shape and size of the small islands in this locality.

The entire inshore area on the outer coast south of the jetties has changed since the last survey. This is no doubt partially due to the change in the littoral currents caused by the construction of the jetties.

OBSTRUCTIONS

A rock pile covered at half tide is located approximately 120 meters out from the high water mark in the vicinity of Old Fernandina.

are A considerable number of old piling, covered at high tide
is located about three-eighths of a mile west of the Quarantine
Station.

LAND MARKS

The most prominent landmarks from the seaward are the Water Towers on Cumberland Island, Amelia Island Lighthouse and the tall Water Tower in Fernandina. It is recommended that these be shown on new charts Nos. 1242 and 1243. It is not believed that any objects other than these shown on the last edition of chart No. 453 should be shown on the harbor charts.

Rocks The rocks shown on the present edition of chart 453 just off the
T South end of Cumberland I. were searched for but were not found.

Respectfully submitted,

F. S. Borden.
F. S. Borden.

The only rock shown on the chart in the locality mentioned is the one shown on H-4436.

A. L. S.

Statistics Sheet No.....

(Field Sheet D)

Date, 1924	Letter	Volume	Positions	Soundings	Miles, Statute.	Vessels
August 6	A	1	66	316	14.5	Launch 2
" 7	B	1	123	489	19.0	" 2
" 8	C	1	120	581	23.0	" 2
" 12	D	2	162	778	35.0	" 2
" 13	E	2	141	571	24.7	" 2
" 15	F	3	174	611	25.0	" 2
" 19	G	3	160	753	30.0	" 2
" 20	H	4	136	592	26.0	" 2
" 25	J	4	66	203	09.0	" 2
" 26	K	4	104	406	16.0	" 2
" 26	K	5	15	47	02.0	" 2
" 27	L	5	107	491	25.5	" 2
" 28	M	5	111	578	29.0	" 2
" 29	N	5	44	220	12.0	" 2
" 29	N	6	14	83	04.0	" 2
" 19	A	7	110	618	25.8	" 1
" 27	B	7	44	248	10.1	" 1
" 29	C	7	60	346	14.0	" 1
September 8	P	6	74	285	11.5	" 2
" 9	Q	6	100	501	09.0	" 2
" 18	R	6	64	312	16.0	" 2
" 18	D	8	107	560	29.0	SHIP
TOTAL:			2101	9589	412.1	

March 14, 1925.

Division of Field Records

Division of Hydrography and Tachygraphy:

Division of Charts:

Tide reducers are approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET 4436

Locality: Vicinity Cumberland Sound, E. Coast of Florida

Chief of Party: F. S. Borden in 1924

Plane of reference is mean low water which is
4.4ft. on tide staff at Fernandina, Florida

For reduction of soundings, condition of records satisfactory
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks

Hamner
Chief, Division of Tides and Currents.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

May 18, 1925.

REPORT ON VERIFICATION OF HYDROGRAPHIC SHEET NO. 4436

Paragraph 225 of the General Instructions was not followed in the spacing of soundings for this sheet.

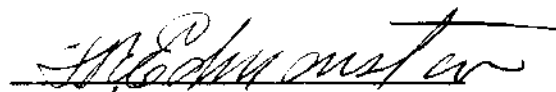
There are very few bottom characteristics given in the sounding records and they were not plotted on the smooth sheet.

The sheet was well protracted but the time intervals were not carefully adhered to.

The beginning and ending of lines were not given in the records.

The least depth was not penciled on the smooth sheet at crossing of lines.

In several places a mean of two soundings were penciled on the smooth sheet rather than one of the soundings.


H. R. Edmonston.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON July 17, 1925

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4436

Stafford Shoal to Amelia Island, Ga. - Fla.

Surveyed in 1924

Instructions dated May 8, 1924

Chief of Party, F. S. Borden.

Surveyed by F. S. Borden, W. D. Patterson and L. C. Wilder.

Protracted by L. C. Wilder, I. Rittenberg.

Soundings plotted by F. S. Borden, E. J. Brown.

Verified and inked by H. R. Edmonston.

1. The records do not conform to the requirements of the General Instructions in the following particulars:

- (a) Beginnings and endings of lines were omitted.
- (b) Bottom characteristics were not always noted. This is particularly true in the ship's work and that of Launch No. 1.

2. The plan and character of the survey conform to the requirements of the General Instructions except that soundings were usually taken at greater intervals than those prescribed in Paragraph 225 of the General Instructions.

3. The plan and extent of the survey satisfy the specific instructions with the following exceptions: ✓

- (a) One or two additional split lines should have been run across the bar at the entrance to Cumberland Sound. ✓
- (b) The area surrounding the 13 ft. sounding now shown on the charts about 1/4 mile S.S.W. of the Whistle Buoy should have been more closely developed. The least water found in this vicinity on the present survey is 18 feet. ✓
- (c) The development of St. Marys River was not extended to St. Mary. ✓

4. The sounding line crossings are adequate.
5. The information is sufficient for drawing in the usual depth curves.
6. The usual field plotting was done by the field party. It was well done but the time intervals were not carefully adhered to. Also care was not always taken to plot the shoalest soundings at crossings, and in several places a mean of two soundings was penciled on the smooth sheet.
7. The junction with H. 4376 on the south (surveyed by the same party) is adequate. ✓
An adequate junction was effected with H. 3770 surveyed in 1915. In general very little change in the depths has taken place along this part of the coast.
The junction with H. 4444 on the north will be taken up in the review of that sheet.
8. The character and scope of surveying are good.
The field drafting is good.
9. Reviewed by A. L. Shalowitz, July, 1925.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4436 (Field Letter D)

State . . . Florida - Georgia

General locality . . . East Coast

Locality . . . Stafford Shoal to Amelia I. and St. Marys Entrance and Vicinity

Chief of party . . . Frank S. Borden

Surveyed by Frank S. Borden, W.D. Patterson, L. S. Wilder.

Date of survey . . . August, 1934.

Scale 1/20,000.

Soundings in . . . Feet.

Plane of reference . . . M. L. W.

Protracted by L.C.W., I.R. Attenberg Soundings in pencil by F.S.B. & J.S. Brown

Inked by Verified by

Records accompanying sheet (check those forwarded):

Des. report, 1 Tide books, 1 ^{Tidal Data} ~~Hydrograms~~, 2 Boat sheets,

8 Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks:

applied to chart 453 reconstr. 8/14/57
" " " 448 " 1957

MR north of $30^{\circ}45'$
GAE south " $30^{\circ}51.3'$ 2^{nd}